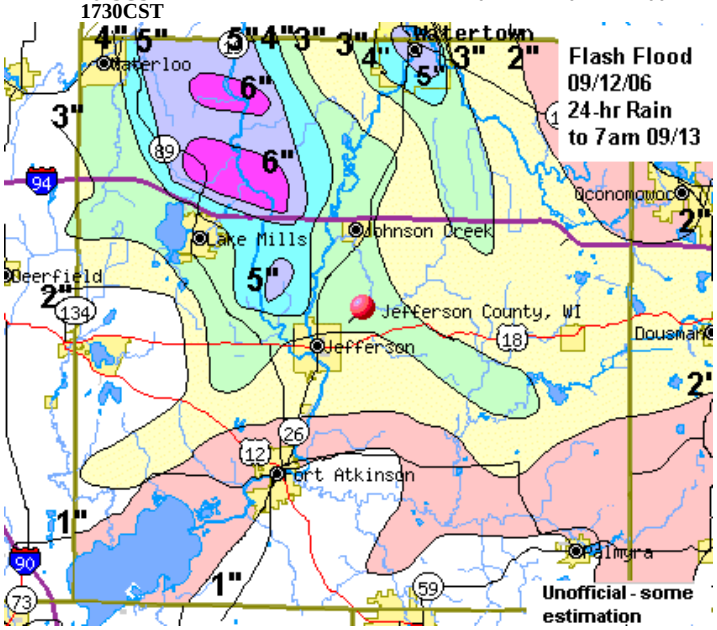
National Weather Service
Storm Data and Unusual Weather Phenomena

September 2006

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
LAKE MICHIGAN									
LMZ644	**Pt Washington To North Pt Lt Wi**								
3 S Port Washington	**08**	**1540CST**			**0**	**0**			**Marine Hail (0.75)**
	Scattered strong to severe thunderstorms developed over southern Wisconsin and moved over Lake Michigan between Sheboygan and Milwaukee during the late afternoon hours.								
WISCONSIN, Southeast									
Washington County									
Jackson	**06**	**1328CST**			**0**	**0**			**Hail(0.75)**
Sheboygan County									
2 SSW Beechwood	**06**	**1405CST**			**0**	**0**			**Hail(0.75)**
Waukesha County									
Lannon	**06**	**1409CST**			**0**	**0**			**Hail(1.00)**
Fond Du Lac County									
New Fane	**06**	**1415CST**			**0**	**0**			**Hail(0.75)**
Washington County									
1.5 NE Kewaskum	**06**	**1428CST**			**0**	**0**			**Hail(0.75)**
Fond Du Lac County									
1.7 WNW Dundee	**06**	**1435CST**			**0**	**0**			**Hail(1.00)**
	Scattered thunderstorms, mostly near lake breeze fronts that pushed inland from Lake Michigan and Lake Winnebago, pulsed to severe limits. Large hail was produced, however, no damage was noted. After maximum temperatures were around 80 with dewpoints around 60. Surface winds were generally from the northwest.								
Dodge County									
4 WSW Lomira	**08**	**1510CST**			**0**	**0**			**Hail(1.00)**
Washington County									
2 E Hubertus	**08**	**1525CST**			**0**	**0**			**Hail(0.75)**
Waukesha County									
1.3 ESE Delafield	**08**	**1537CST**			**0**	**0**			**Hail(0.88)**
Ozaukee County									
3 ENE Grafton	**08**	**1540CST**			**0**	**0**			**Hail(0.75)**
Washington County									
3 N Germantown	**08**	**1540CST**			**0**	**0**			**Hail(1.00)**
Waukesha County									
Duplainville	**08**	**1552CST**			**0**	**0**			**Hail(0.75)**
Ozaukee County									
2 SE Cedarburg	**08**	**1553CST**			**0**	**0**			**Hail(1.00)**
	Scattered thunderstorms, some severe, developed near or along a weak cold front pushing southeast across southern Wisconsin during the afternoon hours. Large hail was produced by those storms that did reach severe limits. However, no damage was noted.								
Dodge County									
Watertown	**12**	**1200CST** **1500CST**			**0**	**0**	**100K**		**Flash Flood**
Jefferson County									
Milford to Lake Mills	**12**	**1215CST** **1500CST**			**0**	**0**	**100K**		**Flash Flood**
Racine County									
Sturtevant to Racine	**12**	**1515CST** **1730CST**			**0**	**0**	**100K**		**Flash Flood**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
WISCONSIN, Southeast									
Waukesha County									
Brookfield to Elm Grove	**12**	**1520CST 1600CST**			**0**	**0**	**100K**		**Flash Flood**
Racine County									
Kansasville to Raymond	**12**	**1525CST 1730CST**			**0**	**0**	**100K**		**Flash Flood**
Milwaukee County									
Wauwatosa	**12**	**1530CST 1730CST**			**0**	**0**	**100K**		**Flash Flood**
Kenosha County									
Kenosha	**12**	**1615CST 1730CST**			**0**	**0**	**100K**		**Flash Flood**



Unofficial rainfall graphic for Jefferson County, based on official rainfall observations and WSR-88D rainfall estimates. Some estimation and smoothing was incorporated.

Scattered flash flood events occurred over southern Wisconsin thanks to a series of slow-moving clusters or short lines of thunderstorms, each with a round of heavy rain, that moved northeast through southern Wisconsin. It didn't help that the soils were nearly saturated before the rain even started. Flash flooding was reported in the counties of Dodge, Jefferson, Waukesha, Milwaukee, Racine, and Kenosha. Based on spotter reports, rainfall rates reached 3 to 5.5inches per hour in some of the most intense storms.

The worst flooding problems occurred in and near Watertown (especially the west side in both Jefferson and Dodge Counties), in the Lake Mills-Johnson Creek area north along the Crawfish River in Jefferson County, in the Brookfield-Elm Grove area in Waukesha County, in Wauwatosa (Milwaukee Co.), in the Kansasville-Raymond-Sturtevant-Racine areas in Racine County, and in the city of Kenosha (Kenosha Co). In all of these areas, the flash flooding consisted of flooded and closed roads with water depths of 1 to 5 feet, flooded basements, and gravel shoulder washouts. Additionally, there was one road washout in Elm Grove where the driver of a vehicle was stranded in the high water levels for about 30 minutes. Nearly every road and backyard in Wauwatosa was flooded.

Jefferson County picked up the greatest amounts of rain. A NWS gage site near Milford on the Crawfish River measured 6.21 inches for the 24-hour period ending about 7 A.M. CDT Thursday, September 13, 2006. Other measured amounts in Jefferson County include - 5.10 at the Watertown WWTP, 4.69 inches at a location 1.2 mile southwest of downtown Watertown (severe weather spotter), 3.59 inches at the Lake MIlls WWTP, 2.70 inches at a river gage site on the south-side of the city of Jefferson, 2.42 inches at the Jefferson WWTP, and 2.02 inches at the NWS office about 3.8 miles southeast of Sullivan. Other rainfall totals include - 3.75 inches in Elm Grove (Waukesha Co.), 3.25 inches in Hales Corner (Milwaukee Co.), 2.48 inches in Caledonia (Racine Co.), and 2.15 inches at the Kenosha Airport (Kenosha Co.). Unofficially, WSR-88D radar rainfall estimates suggest around 3 inches may have fallen in the Kansasville area just northwest of Union Grove (Racine Co.), and over the southeast corner of Kenosha County. Additionally, radar suggested that 4 to 5 inches fell over extreme southwest and south-central Dodge County,

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

west of Watertown.

The several rounds of thunderstorms were the result of a surface low-pressure moving northeast along a front through the Chicago area, while an upper-level low-pressure moved southeast across northern Illinois. These low-pressures pulled and focused moisture over south-central and southeast Wisconsin. The unofficial rainfall graphic for Jefferson County was attached to the Kenosha County flash flood event in order to have the graphic appear in the StormData publication between the flash flood event header-strips above and this narrative which covers the entire flash flood episode for September 12, 2006.

WIZ046>047-051-056>059-062>065-068>070 Marquette - Green Lake - Fond Du Lac - Sauk - Columbia - Dodge - Washington - Iowa - Dane - Jefferson - Waukesha - Green - Rock - Walworth

14 0000CST 0800CST 0 0 Dense Fog

Dense fog developed overnight across parts of south-central and southeast Wisconsin, thanks to clear skies, light winds, and a very moist ground due to recent rains. Visibilities were reduced to zero to 1/4 mile. One person was killed (indirectly-related death) in a vehicle accident southwest of Whitewater and just inside Walworth County. There was another driver killed (indirectly-related death) in a vehicle accident near Madison (Dane Co.). Several airplane flights were delayed or cancelled at Madison's Traux Field and other local airports.

WIZ052-058>060-064>065-070>072 Sheboygan - Dodge - Washington - Ozaukee - Jefferson - Waukesha - Walworth - Racine - Kenosha

15 0000CST 0700CST 0 0 Dense Fog

Dense fog developed overnight across parts of southeast Wisconsin, thanks to clear skies, light winds, and a very moist ground due to recent rains. Visibilities were reduced to zero to 1/4 mile. Two people were killed (indirectly-related deaths) when their vehicle collided with a train about 2 mile northeast of Sturtevant near STH 20. Several airplane flights were delayed at local airports.

WIZ046>047-051>052-057>060-063>064-066-068>069 Marquette - Green Lake - Fond Du Lac - Sheboygan - Columbia - Dodge - Washington - Ozaukee - Dane - Jefferson - Milwaukee - Green - Rock

23 0100CST 0700CST 0 0 Dense Fog

Dense fog developed overnight across parts of south-central and southeast Wisconsin, thanks to clear skies, light winds, and a very moist ground due rain the previous day. Visibilities were reduced to zero to 1/4 mile. Several airplane flights were delayed or cancelled at airports. Important note: although the time listed for Milwaukee County for this dense fog event was 0100-0700CST, in reality the dense fog affected Milwaukee County between 0400 and 0700CST.

Columbia County

.8 NNE Pardeeville 30 1508CST 0 0 Hail(1.00)

Jefferson County

1 E Palmyra 30 1648CST 0 0 Hail(0.75)

Widely scattered airmass thunderstorms popped up during the afternoon hours across south-central and southeast Wisconsin. One relatively long-lived storm pulsed to severe limits a couple times as it moved from Columbia County to extreme southeastern Jefferson County. Large hail was generated by this severe storm, however, no damage was noted. Synoptically, an upper-level trough moved southeast through Wisconsin during the afternoon, with a pool of colder air aloft. Maximum air temperatures at the surface rose into the upper 60s to upper 70s range across southern Wisconsin.